

Assignment Day 8 | 9th December 2020

For any doubts regarding the assignment, ask questions in the [Linux Administration 101 B1 Group](#) in the Community.

Submit Assignments by **12th December 2020 11:59 PM.**

Assignment Submit Form :<https://forms.gle/9MNzWbdDXhhdstWEA>

Submit assignments in Appropriate Dropdowns.

Assignment 0

1. Create a simple shell script to tell the user about their session – they need to know:
 - What their username is
 - What the current date is
 - What the time is
 - What their current working directory is
 - How many files they have in that directory
 - What is the biggest file in their current directory

Assignment 1

Create a directory with a few test files in it (the files can be empty). Now write a script that for every file in that directory you rename it to have an extension of today's date in YYYYMMDD format.

Assignment 2

Write a script that takes a number as an input and reverses it out to the user. For example, if the original number is 74985, the output should be 58947.

Assignment 3

Write a script to validate how secure someone's password is. Things you would care about:

- Length should be 8 or more characters
- The password should contain numbers and letters
- There should be both uppercase and lowercase letters

Assignment 0

```
sunam@kali: ~/Desktop/Letsupgrade_Linux_Essentials

File Actions Edit View Help

#!/bin/bash
echo "----Session Details-----"
echo "Username of the current user is: "$USER.
echo "Current date is: "$(date +%D).
echo "Current time is: "$(date +%T).
echo "Current working directory: "$(pwd).
echo "There are "$(ls | wc -l) "files in current working directory".
echo "The largest file on your current directory is: "$(ls -S | head -1).

~ File System      payload.exe
~
~
~
~
```

```
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ vi assignment0
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ bash assignment0
----Session Details-----
Username of the current user is: sunam.
Current date is: 12/11/20.
Current time is: 21:04:17.
Current working directory: /home/sunam/Desktop/Letsupgrade_Linux_Essentials.
There are 3 files in current working directory.
The largest file on your current directory is: assignment0.
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$
```

Assignment 1

```
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ mkdir assignment1
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ cd assignment1/
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$ touch {file1,file2,file3}.txt
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$ ls
file1.txt file2.txt file3.txt
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$
```

```
sunam@kali: ~/
File Actions Edit View Help
#!/bin/bash
Date=$(date +%Y%m%d)
File=$(ls)
for File in *
do
    mv $File ${File}.${Date}
done
```

```
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$ vi rename
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$ ls
file1.txt file2.txt file3.txt rename
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$ chmod +x rename
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$ ls
file1.txt file2.txt file3.txt rename
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$ bash rename
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$ ls
file1.txt.20201212 file2.txt.20201212 file3.txt.20201212 rename.20201212
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials/assignment1$
```

Assignment 2

```
File  Actions  Edit  View  Help
#!/bin/bash
echo "Enter the number:"
read n
echo "reverse order of $n"
echo $n | rev
~
~
~
```

```
sunam@kali: ~/Desktop/Letsupgrade_Linux_Essentials$ vi assignment2
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ bash assignment2
Enter the number:
12345
reverse order of 12345
54321
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$
```

Assignment 3

```
File Actions Edit View Help
#!/bin/bash
echo "Enter the password: "
read pass
len=${#pass}

if test $len -ge 8 ; then
    echo "$pass" | grep -q [0-9]
    if test $? -eq 0 ; then
        echo "$pass" | grep -q [A-Z]
        if test $? -eq 0 ; then
            echo "$pass" | grep -q [a-z]
            if test $? -eq 0 ; then
                echo "$pass" | grep -q [@,#,$,%,&^*]
                if test $? -eq 0 ; then
                    echo "Strong password"
                else
                    echo "Weak password include special character"
                fi
            else
                echo "Weak password include lowercase letter"
            fi
        else
            echo "Weak password include uppercase letter"
        fi
    else
        echo "Weak password include numeric character"
    fi
else
    echo "Password length should be of 8 character long"
fi

sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ ls
a assignment0 assignment1 assignment2 assignment3 myfile
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ ./assignment3
Enter the password:
sunam
Password length should be of 8 character long
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ ./assignment3
Enter the password:
sunam123
Weak password include uppercase letter
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ ./assignment3
Enter the password:
SUNAM123
Weak password include lowercase letter
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ ./assignment3
Enter the password:
SUNAMrijal
Weak password include numeric character
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$ ./assignment3
Enter the password:
Sunam@123
Strong password
sunam@kali:~/Desktop/Letsupgrade_Linux_Essentials$
```

Thank You!